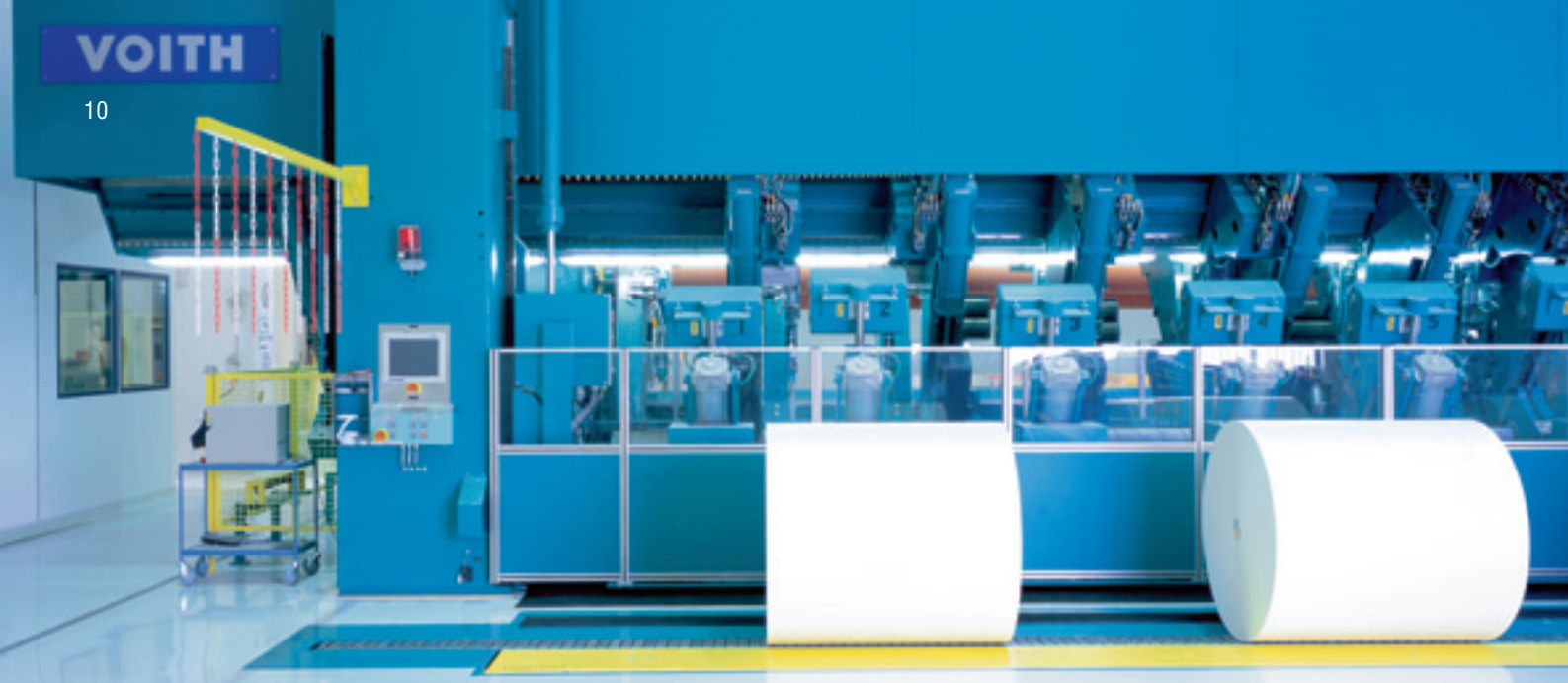

Voith VariTop™ on PM 11 at SCA Graphic Paper Laakirchen, Austria – Top-notch winding

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The SCA Group, a European leader in wood and pulp processing, has concentrated its production of natural chlorine-free graphic grades in Laakirchen, producing a total of about 485,000 t.p.a. of SC-rotogravure and offset papers on PM 10 and 11 respectively. These grades, such as Grapho Gravure, Grapho Set and Grapho Grande, are notable for their high-volume uniformity with outstanding opacity and print gloss, clean mottle-free surface, and excellent print density. Notable are also the strict ecological standards maintained in Laakirchen, for which this plant has won a coveted Austrian environment-protection award.

To meet all these demands, SCA Laakirchen decided on a state-of-the-art solution for their new PM 11. Based on the Voith Paper One Platform Concept, this production line incorporates all modules required for the highest quality SCA+ rotogravure and offset grades. It also includes a VariTop™ slitter-winder (Fig. 1), known as RSM 3, since it is the third one to be installed here – a sure sign of customer satisfaction!

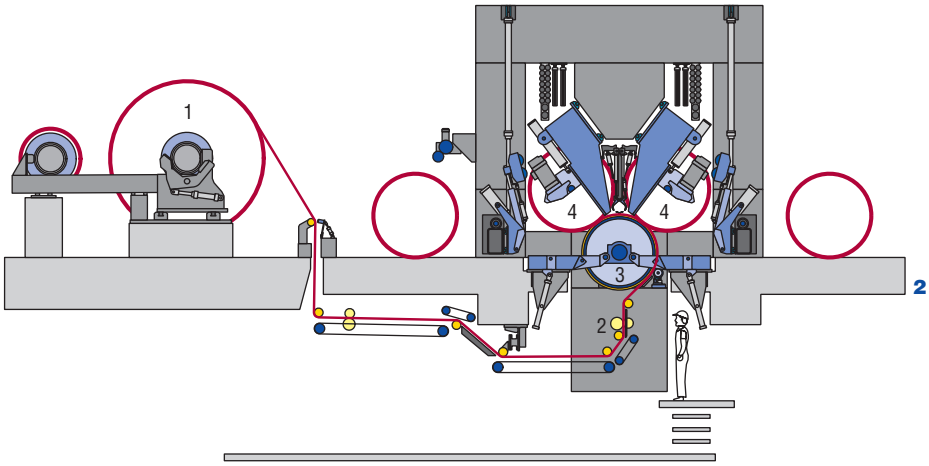
This RSM 3 belongs to the new generation of center drum winders, 150 of which have been supplied since the VariTop™ was first launched. Its technical data are as follows:

- Working width 8,800 mm
- Design width 12,000 mm
- Operating speed 2,800 m/min
- Design speed 3,200 m/min
- Winding diameter 1,500 mm
- Design winding diameter 1,650 mm
- Maximum paper roll weight 10 tons.

From this data, the enormous reserves incorporated in RSM 3 are clearly evident. While paper rolls today are up to 1,500 mm in diameter and 3,700 mm wide, a quantum leap is already apparent

Fig. 1: *VariTop™ slitter-winder on PM 11 at SCA Graphic Paper, Laakirchen.*

Fig. 2: *VariTop™ layout.*



with respect to printing presses, whose working width will rise sooner or later to 4,300 mm. It is therefore very reassuring to know that this – and more – has already been taken into account with the new RSM 3 slitter-winder.

Based on the VariTop™ layout shown in Fig. 2, here are some more details of this concept:

Paper from the unwind (1) first runs through the slitting station (2) and the glue application device, then enters the nip between the web draw isolator roll (web tension interruption roll) and the center drum (3), passes around the latter drum and is finally taken up in the winding stations (4). The slitter knives are automatically positioned by a servo-driven belt which moves the top and bottom knives. Since all elements are adjusted together, repositioning is also possible with the sheet in the machine. The slitter station is fitted with Blue Slit™ top knives, which last two to three times longer than conventional knives. And thanks to the patented design of the bottom knives, they do not have to be recalibrated after sharpening. The glue applicators are automatically swivelled into the operating position, and after applying glue to the paper they return to the parking position. Web tension is removed by the web draw isolator roll installed between the unwind stand and the rewind stations. The rewind stations incorporate additional center drives and rider rolls. The stations are positioned in coordination with the slitter knives. Thanks to the controlled co-operation of web draw isolator roll, center drives and rider rolls, the winding structure of the finished paper rolls is optimized for subsequent processing, with ideal geometric form (perfectly square ends; no telescoping). This is assisted by the MultiDrive™ cover of the center drum. The RSM 3 slitter-winder layout is largely decentralized, with a busbar control system instead of parallel wiring. In addition to the master computer with graphic user interfaces in the control room, local terminals with monitors are also provided. Trouble-shooting is assisted by a defect diagnosis system which immediately indicates the incident type, location and time of occurrence, the probable cause and the recommended action.

Dr. J. Hafellner, SCA Graphic Paper Laakirchen, was very impressed by the successful RSM 3 startup: *"Installation proceeded without a hitch in only six weeks, largely thanks to complete workshop assembly beforehand. And I pay tribute to the ingenious commissioning engineers: by first winding paper from the narrower PM 10 on to a new PM 11 reel spool, they were able to test and optimize the RSM 3 VariTop™ prior to PM 11 startup. This enabled immediate product processing afterwards, at the same time stabilizing operating speeds at 2,400 m/min. Optimization is currently in progress for raising the production speed to 2,800 m/min. The machine clearly has substantial potential, which we and Voith shall soon be exploiting step by step."*

Voith is very delighted about this positive opinion, and pays tribute in turn to the successful teamwork, which will certainly benefit the fine-tuning phase.